

20020601.ba v03_n340.bam.20020601

>From ???@??? Sat Jun 1 00:00:51 2002 -0500
Message-Id: <200206010500.g5150ex6000353@sco.theporch.com>
Date: Sat, 1 Jun 2002 00:00:11 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3340

BOATANCHORS Digest 3340

Topics covered in this issue include:

- 1) Re: Capacitor lifetime & a little info on new materials
by "Barry L. Ornitz" <ornitz@tricon.net>
- 2) More BA Literature For Sale
by Merz Donald S <merz.ds@mellon.com>
- 3) RA-17 Enthusiasts?
by "Richard Dillman" <ddillman@igc.org>
- 4) How do you id PCB's? What to do?
by "Tarheel6" <Tarheel6@email.msn.com>
- 5) San Jose surplus shops
by Chuck Swiger <cswiger@widomaker.com>
- 6) Re: Wanted: 6BQ5's
by "russ dworakowski" <wb3fau@hotmail.com>
- 7) Station KFS On The Air for Testing
by "Richard Dillman" <ddillman@igc.org>

Message-ID: <010c01c20769\$621b1de0\$e05362d8@naxs.com>
From: "Barry L. Ornitz" <ornitz@tricon.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Capacitor lifetime & a little info on new materials
Date: Wed, 29 May 2002 19:34:26 -0400
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

John Gibson <gibsonj@mindspring.com> initially asked:

> I have always replaced the leaky waxed paper
> caps in vintage radios with polyester caps thinking that
> they will last forever. But is this true? Has any
> estimate been made of their lifetime?

Arden Allen <gumbear@pacbell.net> then answered:

> Does anything last forever?

and continued with anecdotal evidence of the longevity of modern film capacitors. He then concluded:

> Beings the film is a relatively pure substance, free from
> internal degradation, I believe only extreme heat would
> lead to destruction. They would essentially have to melt
> and then short out as opposing plates come in contact
> with each other or the melted plastic shorted through
> from electrostatic stress and physical distortion. I
> think your leakage worries are over for the next
> millenium or two.

Having spent most of my career involved in manufacturing polyethylene terephthalate polyester (PET, Mylar[®] is DuPon'ts variety), polypropylene (PP) and polytetrafluoroethylene (PTFE, Teflon[®] is the most common variety), and been involved in a few research projects on other newer materials occasionally used in capacitors such as polyphenylene sulfide (PPS), polyethylene naphthalate (PEN), and cyclohexane dimethanol modified polyester (PETG), I think I can address this issue. I also am familiar with polystyrene (PS) and polyphenylene oxide (PPO) materials.

Of these, the PS and PTFE capacitors tend to have specialized uses and are not often found. The PPS and PEN materials are relatively new and I expect to see more of them in high temperature applications. The PETG material was investigated for film capacitors at least 30 years ago and found to have some advantages over conventional PET, but Eastman management decisions prevented further development. It is being looked at again today.

So this leaves the conventional PET and PP materials for most of the film capacitors we can find today. Polypropylene is a good dielectric material with quite low losses at higher frequencies, but its low temperature rating limits its application in many circuits. The lifetime of polypropylene capacitors should be exceptional as long as they are not overheated.

Polyester capacitors have greater dielectric losses, especially at high frequencies, but having a higher dielectric constant than PP and a higher temperature rating they are probably the most popular film capacitor material today. Their lifetime is probably somewhat less than

polypropylene, but the term "forever" means different things to different people. Moisture will eventually react with the polyester structure to decrease its polymer chain length. It will also react with the heavy metal catalysts (typically antimony) to form ions which will increase the leakage in capacitor applications. The effect will be seen with wrapped foil capacitors long before it is seen with those whose electrodes are metallized onto the film (the aluminum metallization retards the diffusion of moisture into the polyester).

>From a practical viewpoint, even wrapped foil polyester capacitors will certainly outlive those reading this message - that is, if they are kept relatively dry and not overheated. Metallized polyester capacitors will last much longer. My guess is at least a few hundred years. Somehow I cannot be convinced to worry about what might happen to a Boatanchor a millennia from now!

Electrolytic capacitors are an entirely different story. They need moisture to function (normal room relative humidity is fine, but storage under exceptionally dry conditions will shorten their life). The so-called dry electrolytics are not really dry, they contain a paste that needs some moisture to remain electrolytically conductive.

Carbon composition resistors certainly do age, but the modern thin-film resistors have good lifetimes. Tubes do lose vacuum, especially the softer glass receiving tube varieties. But these generally do not need quite as hard a vacuum as transmitting tubes. Most large transmitting tubes use borosilicate glass which is better than the soda-lime glass found in small tubes.

Probably the fastest aging things in our old radios are the transformers with paper insulation, and the vinyl insulation on wires. Keeping everything cool will help more to prolong the life of this old gear more than anything.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net

Message-ID: <20020530153036.8898.qmail@mellon.com>
From: Merz Donald S <merz.ds@mellon.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: More BA Literature For Sale
Date: Thu, 30 May 2002 11:29:53 -0400

MIME-Version: 1.0
Content-Type: multipart/alternative;
boundary="-----=_NextPart_001_01C207EE.D8845FC0"

This message is in MIME format. Since your mail reader does not understand this format, some or all of this message may not be legible.

-----=_NextPart_001_01C207EE.D8845FC0
Content-Type: text/plain;
charset="iso-8859-1"

More BA Literature For Sale

The Radio Workbench, Federal Telephone & Telegraph Company, 1923. 38 page heavily-illustrated booklet on building early BC radios using Federal parts. Some chips out of covers. Otherwise good and not overly fragile. \$17 PPD

Wurlitzer "Automatic Phonograph" Model 1015 original service manual and parts catalog. This is for the famous bubbling jukebox. Excellent book full of diagrams and photos. No covers. Some water stains. But very usable. \$15 PPD

Radio Operators Information File. WWII instruction book included with B-24 liberators to train aircraft radio operators on the plane's radio systems. Printed in color. Has all the command set radios, BC-348, BC-375, IFF Gibson Girl and etc. Shows many photos and diagrams. An exciting addition to any WWII aircraft radio collector's library. \$130 PPD

R/9 magazine, 11/34. Covers dirty but in nice shape. Rare early ham magazine. \$5

Ford Sales Brochure: 1984 Ford Wagons. Nice. Free. Quality is job one.

Radio Amateur DX Guide, undated, kind of beat up. Published by Radio Amateur Callbook magazine. \$3

RCA Ham Tips, October, 1939. Rare pre-war Ham Tips. This issue trumpets the introduction of the 811 and 812 tubes. The 828 gets second billing on the back cover. Good, usable shape. \$5

RCA Ham Tips, 11/12, 1946. Covers ratings for common RCA receiving tubes when used in transmitting circuits. Good. \$3

United Electronics Laboratories, An Introduction to Electronics, Radio, Television and RADAR, 1956. This is one of those booklet-based training courses. But this one has a unique format with oversize pages in a binder bound at the top instead of at the side. Some great photos, but this is mostly basic electronics. Nice shape in every respect. \$8 PPD

101 Ways to use your VOM and VTVM by Robert G. Middleton, Sams, paperback, 1964, good condition. \$11 PPD

Troubleshooting With The VOM and VTVM by Robert G. Middleton, Sams, paperback, 1962, good condition. Most of this is targeted at TV Servicing. \$7 PPD

Triplett Model 2413 Tube Tester sales glossy, maybe 1946 vintage. Chipping at top edge and wrinkled elsewhere. Free.

Hickok Price List Effective January 15, 1940. Free

Westinghouse Tube Substitution Guide, pocket-size, Undated but probably Early 1960s. \$3 PPD

FCC Rules and Regulations Part 95, for the Citizens Radio Service, April, 1976. Free.

Elements of Radio by Marcus and Horton dated 1945. This was originally published as a 2-volume set but this version has both volumes in one book. Nicely done with theory very adroitly applied to practical situations. Hardback in nice shape. \$12 PPD

Elements of Radio by Marcus and Horton dated 1945. This is Volume 1 only of the original version. Dated 1944. Very well written. Hardback in nice shape. \$7 PPD

The Cathode Ray Tube at work by John F. Rider dated 1936. Typically thorough Rider treatment of what was then a cutting edge radio measurement tool. Hardback with lots of wear. Fraying at edges. \$14 PPD

Radio Operating Questions and Answers by Hornung and McKenzie dated 1952. A text designed to help get your commercial radio operator's license. Nice shape. \$8 PPD

World Radio Labs. original manual for Universal Modulator UM-1 Very good condition with 3 original oversize construction drawings. \$12 PPD

Radiotron Designer's Handbook 3rd edition, RCA, May, 1945. Not as

comprehensive as the later 4th ed. but still an excellent reference.
Excellent Hardback. \$22 PPD

Military TM 11-2627 Tube Tester I-177 original manual dated August,
1944. Covers dirty but very good original condition. \$18 PPD

International Rectifier Solar Cell and Photo Cell Handbook, over 100
pages, many circuits, Complete product specs, November, 1960.
Excellent. \$8 PPD

Sylvania Industrial Uses for Germanium Crystals, 1954, 42 pages,
like new. \$8 PPD

Sylvania Transistor Circuit Handbook For The Hobbyist, 1960, 65
pages, like new. \$8 PPD

Sylvania 40 Uses For Germanium Diodes, undated but must be early
1950's--the latest diode listed is 1N60. Like New. \$8 PPD

Sylvania Performance tested Transistor Circuits, 1958, 53 pages,
like new. \$8 PPD

Ameco Advanced Class Radio Amateur's License Guide, 1968. Free

Heathkit ID-2295 Indoor/Outdoor Thermometer Pull Out Diagrams
from manual (no manual--just the diagrams). Free

Practical And Amateur Wireless, January 30th, 1937.
British magazine, mostly BC. No covers. \$3

RCA New Semiconductor Products Service Mailing 67-C dated
July, 1967. This is a group of about 20 RCA transistor
and IC spec sheets designed to go into an RCA Semiconductor
Products Databook. Opened but basically brand new. \$10 PPD

RCA New Semiconductor Products Service Mailing 67-B dated
April, 1967. This is a group of about 20 RCA transistor
and IC spec sheets designed to go into an RCA Semiconductor
Products Databook. Unopened--brand new. \$10 PPD

CQ Magazine, 11/70, 50 cents

VHFer Magazine, 8/65 (Parks Electronics), 50 cents

Communications World, Spring/Summer, 1971, 50 cents

Sylvania, Electronic Shortcuts For Hobbyists, 1951. This is actually 24
Small projects that use crystal diodes, primarily 1N34A, 1N56A, etc.
Very cool early solid state promotional book. Excellent. \$9 PPD

Kretzman, The New RTTY Handbook, CQ, 1962. A classic. Good. \$10 PPD

The Short-Wave Magazine, May, 1934. Interesting British shortwave mag.
Good. \$7 PPD
RCA Transmitting Tubes, 1956. Pages coming loose, spine bad. \$6 PPD
Grammar, A Course In Radio Fundamentals, ARRL, Very good. Classic
novice projects. \$8 PPD
ARRL, Operating An Amateur Radio Station, 1952. Good. \$5 PPD
ARRL, Operating An Amateur Radio Station, 1953. Good. \$5 PPD
Navy Training Courses # 10314, Advanced Work In Aircraft Radio, 1945.
Good. \$10 PPD
Don Merten, W2UOL, Eldico, "TVI Can Be Cured," Undated but early 50's
for sure. \$8 PPD
RCA Type 167-B Test Oscillator manual. This is undated but from the late
30's or early 1940's. One chip is out of the front cover top right
corner. But this is otherwise in excellent condition. \$6
Noistop accessory noise blanker for a vintage mobile ham radio or CB
or business band radio installation. I know nothing about this and
have no manual. I can see 2 tubes inside the unit. But it is untested
and as-is. \$5
Radio Handbook 18th ed., edited by Bill Orr, W6SAI. 1970. Very good
condition but binding edge has faded from the original green to
almost yellow. \$17
Sylvania Technical Manual: Cathode Ray Tubes. Looseleaf binder with
characteristics of hundreds of CRTs and picture tubes.
Excellent. \$9
Sylvania Radio & TV Tubes Characteristics. 8.5x11 booklet listing
receiving tube characteristics. Undated but looks to be from 1960 or
thereabouts. \$9
Heathkit 1957 complete catalog. Cover dirty and water stained. Otherwise
Excellent with unused order forms. \$12

Tektronix 516 'scope original manual. Excellent. 2 available. \$9 each.

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Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

* * * * *
* ---REMAINDER OF MESSAGE TRUNCATED--- *
* This post contains a forbidden message format *
* (such as an attached file, a v-card, HTML formatting) *
* Mail Lists at theporch.com only accept PLAIN TEXT *
* If your postings display this message your mail program *

* is not set to send PLAIN TEXT ONLY and needs adjusting *

-----_=_NextPart_001_01C207EE.D8845FC0--

From: "Richard Dillman" <ddillman@igc.org>
To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 30 May 2002 21:18:10 -0700
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Subject: RA-17 Enthusiasts?
CC: tom horsfall <wa6ope@hotmail.com>,
 steve Hawes <omssjh@uclink4.berkeley.edu>
Message-ID: <3CF69712.31409.2F0CFB5@localhost>

Any RA.17 enthusiasts out there? I've just re-mounted my RA.17L
in the rack along with its accessories. Check it out at

<<http://www.radiomarine.org/RA-17.jpg>>

>From top to bottom the picture shows the RA.137 LF converter,
RA.63 SSB converter, RA.17L and TF-3-C fine tuning unit. This
last is a seldom seen accessory used with RA.17s in "Her
Majesty's Service". The RA.17L was also in government service.

The receiver was recently overhauled by Rob Filby in the UK who
did an excellent job of putting the old girl back in top shape. The
RA.17L is my favorite receiver among the many in my collection.

Regards,

Richard

Richard Dillman, W6AWO
Member of the Maritime Radio Historical Society
<http://www.radiomarine.org>
Collector of Heavy Metal:
Harleys, Willys and Radios over 100lbs.

Message-ID: <007a01c2085a\$ef9c360\$9bb04cd8@default>
From: "Tarheel6" <Tarheel6@email.msn.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: How do you id PCB's? What to do?

Date: Fri, 31 May 2002 00:23:34 -0400

Fellow Anchorites...

I just purchased an Army RA-42 power supply, which is about 55 years old, and when I removed the cabinet found that sections of the inside of the cabinet and chassis were stained from a liquid residue that had leaked out of the filter capacitor. Most of the residue is dried; but some of sections have a layer of stain that has a rubbery consistency. Also, on some of the surfaces the residue is thick enough (but still very thin) to be peeled off.

Having heard about PCB's on this list ... I immediately wondered if this residue had PCB's in it? How can I test it for PCB's? Or should I just assume that since it is 55 years old, it is bad stuff and paint over it so as to contain whatever it is. Or should I attempt to remove the residue and remove the leaking capacitor? Or is there some way to neutralize this residue...?

Any help about what I should do and not do would be greatly appreciated.
thanks in advance,
-tom

Message-Id: <4.3.1.1.20020531100625.00b4fb20@wilma.widomaker.com>

Date: Fri, 31 May 2002 10:23:22 -0400

To: Old Tube Radios <boatanchors@theporch.com>

From: Chuck Swiger <cswiger@widomaker.com>

Subject: San Jose surplus shops

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"; format=flowed

Gang -

I'm looking for any leads to interesting surplus shops in San Jose area to visit while out there for a family wedding. A web search turns up:

Action computer & surplus

Advanced components and electronics #1 & 2

Alltronics

Anchor electronics (sounds interesting)

Curtis Trading

Deds Lindsey

Nicholas Bernhardt

Excess Solutions

Halted Specialities

Haltek

Mike Quinn

R&C Wholesalers

RA Enterprises

Sharon Ind.

Standard Cost and
Weird Stuff

Won't have time to look into all so recommendations of
any favorites appreciated.

BA Story: Pulled the SX-62A out of storage for bedside use (replacing
a BC-348N, what a reliable set.) At first the '62 had lots of BC AM
stations right in the middle of the 75mtr ham band, but after a night of
use they went away. Wonder what was going on to cause that - moisture
somewhere?

Chuck
kb4new
cswiger@widomaker.com

From: "russ dworakowski" <wb3fau@hotmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: dcboatanchors@mailman.qth.net, dcboatanchors@topica.com,
vintage-radio@mailman.qth.net
Subject: Re: Wanted: 6BQ5's
Date: Fri, 31 May 2002 10:59:33 -0400
Mime-Version: 1.0
Content-Type: text/plain; format=flowed
Message-ID: <LAW2-F107r3wSimD3Jk000117a0@hotmail.com>

Please, if you would, give more info on this Lithuanian contact for
tubes etc. I would like to make a purchase. Russ

>From: john <johnmb@nc.rr.com>
>Reply-To: johnmb@nc.rr.com
>To: Old Tube Radios <boatanchors@theporch.com>
>CC: boatanchors@theporch.com, dcboatanchors@mailman.qth.net,
>dcboatanchors@topica.com, vintage-radio@mailman.qth.net
>Subject: Re: Wanted: 6BQ5's
>Date: Tue, 28 May 2002 21:02:44 -0400
>
>I've bought items through that fellow in Lithuania,
>and I recommend him. He has good material and
>ships it quickly and more inexpensively than most people
>charge for shipping items domestically!
>
>KWTubes I think, is the username there. He's a good guy!
>John
>
>

>At 06:27 PM 5/28/02 -0500, jackiv@juno.com wrote:
> >Another comment on the short life of 6BQ5s - check the grid coupling
> >capacitors, if they are leaking the tubes will draw lots of current and
> >actually avalanche then there goes the cathode coating. Quick check on
> >that amp- pull the output tubes and fire it up, gain contro;s at minimum,
> >if any positive voltage is shown on the cotrol grid pins, ya gotta
> >problem. replace the caps at once.
> >
> >jack jackiv@juno.com
> >
> >
> >On Tue, 28 May 2002 11:45:44 -0700 Arden Allen <gumbear@pacbell.net>
> >writes:
> >> Hi Avery;
> >>
> >> > A guitar-playing friend has a single-end amp that goes through
> >> 6BQ5's
> >> every
> >> > few hours.
> >>
> >> Maybe it's just his playing. Hi! There is a good source for
> >> Russian built
> >> 7189's on eBay in Lithuania. They are supposed to be military
> >> grade
> >> quality. Best price you will find. Just do a search on 7189, 6BQ5
> >> or
> >> EL84.
> >>
> >> Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net
> >>
> >>
> >
> >
>

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From: "Richard Dillman" <ddillman@igc.org>
To: Old Tube Radios <boatanchors@theporch.com>
Date: Thu, 30 May 2002 19:11:38 -0700
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Subject: Station KFS On The Air for Testing

CC: MRHS-Members@mindspring.com
Message-ID: <3CF6796A.4397.2B0D5E9@localhost>

Morse code coast station KFS will return to the air for testing this weekend.

KFS has a rich tradition and history that includes the use of high powered arc transmitters and today's HF email system operated by Globe Wireless. The last commercial Morse message in North America was transmitted from the KFS master station in Half Moon Bay, California.

In preparation for "Night of Nights III", the annual event in which the Maritime Radio Historical Society returns ex-RCA coast station to the air on its original commercial frequencies, permission has been granted from Globe Wireless to return KFS to the air as well.

This weekend we will be testing one of the transmitters to be used to activate KFS for Night of Nights III (12 July) on 17026.0kc., an original KFS "A" frequency. Testing will begin at about 1300 to 1400PDT (2000 to 2100GMT) on Saturday, 1 June.

Reception reports would be most welcome. If you copy KFS please reply to this message with details of the time of reception, signal strength, your location and your receiving setup.

VY 73

RD

Richard Dillman, W6AWO
Member of the Maritime Radio Historical Society
<http://www.radiomarine.org>
Collector of Heavy Metal:
Harleys, Willys and Radios over 100lbs.

End of BOATANCHORS Digest 3340
